

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
<b>700 MHz BLOCK A GOOD FAITH</b>	)	RM No. 11592
<b>PURCHASERS ALLIANCE</b>	)	
	)	
Petition for Rulemaking Regarding	)	
Exclusivity Arrangements Between	)	
700 MHz Band Mobile Equipment	)	
Design and Procurement Practices	)	

**REPLY COMMENTS**

IPWireless, Inc. (“IPWireless”) hereby submits Reply Comments in response to a Public Notice inviting input on a petition for rulemaking (“Petition”) filed by the 700 MHz Block A Good Faith Purchasers Alliance (the “Block A Alliance” or “Petitioners”).<sup>1</sup>

**I. Background**

IPWireless is a developer and manufacturer of 3GPP User Equipment.

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<sup>1</sup> *Public Notice*, DA 10-278, released February 18, 2010 (“*Public Notice*”). The deadline for submission of these Comments is March 31, 2010, as determined by the Federal Register publication date.

The company currently supplies 3GPP Release 7 User Equipment (UE), covering the entire 700 MHz band from 698 to 798 MHz, including 3GPP band classes 12, 13, 14 and 17. This includes the lower A block which is the subject of this proceeding, as well as the public safety broadband allocation and the upper D Block. This equipment has FCC Equipment Authorization. Similar user equipment supporting 3GPP Release 8 LTE is planned to be available in 2011, also supporting the entire band.

## **II. Response to Comments Filed**

Comments of some companies opposing the petition have referenced potential interference issues from television channel 51 immediately below the A block, and from the lower D and E unpaired blocks that may be used for high power broadcast services. IPWireless agrees that interference may occur in some cases, but not all: The typical frequency use plan used in full power UHF television services means that channel 51 is only used in a minority of markets, particularly in rural areas. Likewise, broadcast services in the D and E blocks such as MediaFlo are often not present in these markets. Therefore it seems unreasonable to exclude the lower A block licensees from obtaining product simply on account of interference that may occur in other markets.

The lower channel of the A block pair (which is adjacent to TV channel 51), is the base station receive frequency. This means that there is not an issue with interference into User Equipment (UE) from channel 51, and therefore on this basis there should be no technical reason to exclude the A block from support in UE.

The UE receive frequency is adjacent to the lower E block, but as noted above, the lower E block may not be used in many markets, particularly in rural areas. Interference into the lower A block UE receiver from the lower E Block may be either adjacent channel interference (leakage) into the A block UE receiver, or adjacent channel blocking of the UE receiver. In the case of adjacent channel leakage, there is nothing that can be done in the UE to mitigate this; once the interference is in-band, no filtering in the

receiver can remove it. Blocking can be mitigated by UE receiver filtering. While an additional filter for the A block may be required to mitigate blocking, the state of the art in filter technology allows multiple filters in User Equipment at minimal cost. Blocking is only an issue for user devices in close geographic proximity to MediaFlo or other transmitters. A key strength of 3GPP standards is the support of wide scale roaming, and to achieve this, a typical UE supports multiple bands. Therefore the question for the UE manufacturer is not one of supporting just a single band, rather a question of which set of multiple bands to support, which then determines the number of filters in the device front-end. A roaming device will typically support 6 or more bands, including LTE, HSPA and GSM bands, so the addition of an extra filter to mitigate 700 MHz E block receiver blocking is a marginal issue.

Similar coexistence issues exist within the 700 MHz band, between the base station transmitters of the upper C block and the UE receivers of the lower C block (band 17 and band 13), yet UE manufacturers are apparently not excluding the support of these bands from 700 MHz devices. While base station power levels in the upper C block may be lower than in the lower D and E blocks, there is a higher probability that users will be physically closer to a cellular base station than a high power broadcast transmitter, therefore the potential interference issues are similar.

We note that similar adjacent channel issues exist in other bands, an example being the 2500 MHz EBS/BRS band. In this band, uncoordinated Time Division Duplex (TDD) systems can be on adjacent channels, with the potential for similar adjacent channel interference and blocking issues to those in the 700 MHz band, yet manufacturers of user devices typically do not exclude specific channels from their EBS/BRS products.

### **III. Conclusion**

The Commission has long supported innovation. As an innovative company that has existing product covering the entire 700 MHz band, IPWireless' view is that technology exists to mitigate interference

concerns in the this band. In our view, support of the A block in a manner that reasonably mitigates adjacent channel blocking is technically feasible, and the choice by a device manufacturer of whether or not to support the A block is primarily a commercial rather than technical decision.

Respectfully submitted,

IPWireless, Inc.

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